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ABSTRACT

The near elderly are a vulnerable segment of the population with high-expected medical expenses. Individuals who retire before Medicare eligibility may lose employer provided health insurance, and may face a potentially costly uninsured period. We use data from the Health and Retirement Study from 1992 to 2002 to profile the insurance status of workers who retire. We also evaluate the role of the Health Insurance Portability and Accountability Act (HIPAA) in reducing the number of uninsured among the near elderly. We find that a relatively small proportion of workers lose health insurance on retirement; however, we find no evidence that HIPAA has helped these workers to remain insured.

INTRODUCTION

The near elderly are a vulnerable segment of the population. Because the prevalence of poor health and chronic disease rises with age, the near elderly have higher expected medical expenses than younger cohorts. For instance, average annual health care expenditures for persons age 45-64 are 85% higher than for persons aged 18-44 (\$3,500 compared to \$1,900).¹ Furthermore, expenditures are extremely skewed with the top 1% of the population accounting for 25-29% of the expenditures, and the bottom 50% accounting for only 3% of expenditures.² As a result, uninsured households face a wealth depletion of 20% in the face of a health shock compared to a drop of 2% for insured households.³

Prior to the age of Medicare eligibility (65), employer-provided health insurance is a valuable resource for the near elderly. While 38% of all retirees over age 65 were covered by employment-based insurance in 2002, 64% of early retirees (55-64) had such coverage. Despite the importance of retiree health insurance, employer coverage for retirees has been declining over time. While 68% of retirees were covered by employer provided health insurance in 1992, only 45% of retirees had such coverage in 2002.

Furthermore, 45% of workers were offered retiree health insurance coverage in 1992 compared with 30% in 2002.⁴

The availability of health insurance is a crucial factor in maintaining the health of the near elderly, particularly because the onset of chronic conditions is likely at this age. People who are uninsured are much more likely than those with insurance to forgo needed medical care. They are also less likely to receive preventive care and regular care for chronic conditions, and they typically receive lower quality of care.⁵ Reduced access to medical care among the uninsured has been shown to lead to poorer self reported health, increased functional limitations, and higher mortality rates.⁶ The deterioration in health status that results from lack of health insurance for the near elderly is likely to have implications for health care costs after age 65, during the time that Medicare provides health insurance coverage to seniors.⁷

The near elderly can have problems gaining access to affordable health insurance. Few routes to public insurance exist: Unless blind or disabled, persons under age 65 cannot qualify for Medicare or Medicaid. Options for purchasing health insurance in the private market are often equally restrictive, largely because of high premium costs. Workers who leave an insured job have the option to

continue group coverage—known as COBRA coverage—for up to 18 months by paying 102% of the premium.⁸ Only a small fraction of those eligible to purchase COBRA coverage do so, however, take-up is higher among older workers.⁹ The high cost of COBRA coverage (\$7,000 to \$8,000 for family coverage) may be a deterrent for many, especially for those who have just left a job.¹⁰

Title I of Health Insurance Portability and Accountability Act of 1996 (HIPAA) mandates that health insurance coverage must be offered, without pre-existing condition exclusions, to qualifying individuals who leave group employment. States can choose to mandate that health insurance companies guarantee issue products to qualifying individuals. States can also choose to mandate an “acceptable alternative mechanism” to comply with HIPAA, such as expanding the state’s high-risk pool to incorporate qualifying individuals. HIPAA does not incorporate any premium regulation; therefore, it is unclear that HIPAA insurance is affordable for early retirees. However, HIPAA provides a longer-term guarantee of access and so may have larger effects than COBRA on insurance.

The existing literature on the effects of HIPAA has not found that the individual market grew; however, the literature has been hampered by the inability to control

for general trends in insurance and for pre-reform availability of insurance.¹¹ In addition, previous research has not focused specifically on the near elderly retiree population that we believe are most likely to be affected by HIPAA.

In this study, we use data from the Health and Retirement Study (HRS) from 1992 to 2002 to profile the insurance status of workers who retire. We conduct a descriptive analysis of the time path of insurance coverage after retirement, and analyze the factors that are associated with a loss of health insurance. We also evaluate the role of HIPAA in reducing the number of uninsured among the near elderly. Understanding the effectiveness of current policy, and determining the extent and nature of the problem of the uninsured among the near elderly is an important step to designing effective policy for covering these individuals.

DATA AND METHODS

Data

Our analysis uses the HRS, a nationally representative panel survey of individuals born from 1931 to 1941 in the first wave of the survey. Following the first wave of data collection in 1992, subsequent waves of data have been

collected every two years. We use the first six waves of the HRS (1992-2002). In addition to basic demographic and health data, the HRS collects detailed longitudinal information about labor force status, health insurance, retiree health benefits, income, and wealth. Information on state of residence is also available for the restricted use HRS data set. Data are collected for sampled individuals and their spouses.

We restrict the analysis sample to individuals who retire during the panel survey, and select the observations after the reported retirement date, but before the age of Medicare eligibility (65). Our sample consists of 2653 individuals, and of these 1902 had employer provided health insurance at the time of their retirement.¹² Each individual's post-retirement insurance history is cast in two-year periods (corresponding to the waves of HRS data collection). So, each individual can have up to five observations. Our analytic file consists of 5140 individual-wave observations.

The HRS health insurance data was redesigned in 2002. Unfortunately, the insurance categories are not comparable between the pre-2002 period and the 2002 wave. Therefore, we have restricted our analysis of the 2002 data to a variable that measures whether or not an individual is

insured – this variable appears to be consistently measured over time.

Methods

Profile of Health Insurance for Retirees

We conducted a descriptive analysis of the time path of health insurance status after retirement, and tabulated post-retirement health insurance by the retiree's health insurance status before retirement.

We fit a logit model for insured status after retirement. The explanatory variables in our model included worker demographics (age, sex, education, marital status, and race), health (medical conditions, self reported health, and body mass index), and last job characteristics (wage and tenure). The model also contained spouse characteristics, if the worker was married. These included demographics, health, and job characteristics if employed. The model also included a variable for the availability of health insurance after retirement from a spouse's employer provided plan or from the workers' own retiree health insurance plan, and control variables for the number of waves after retirement.

All analyses were weighted using the sample weights in the HRS. Marginal effects are shown as the average,

predicted insurance rates for the estimation sample at each value of the characteristic.

Estimation of the Effect of HIPAA on Health Insurance

Our analytic design focuses on before-after HIPAA comparisons of insurance rates within groups of states and within groups of affected individuals.¹³ Because states differed in their individual market regulations prior to the implementation of HIPAA, we form clusters of states that had a similar pre-regulatory environment and examine changes post-HIPAA within this cluster of similar states. We also identify a control group of states that had pre-HIPAA regulations that matched or exceeded the HIPAA reform requirements. Changes that we observe in these states are used as a measure of the secular trend that would otherwise have occurred in the absence of HIPAA in the states that adopted new regulation in response to HIPAA. That is, by comparing the change in an outcome among states that adopted legislation to conform to HIPAA requirements with the change in states that did not need to do so, we infer how much of the observed change is due to the legislation and how much to secular change.

We supplement this analysis by also comparing insurance rates of sub-groups of individuals before and

after the implementations of HIPAA that we expect are more and less likely to be affected by HIPAA, within states that did not have state regulations that matched HIPAA. Sub-groups with access to alternative health insurance plans, for example through spousal coverage, are less likely to be affected by HIPAA than sub-groups who do not have such access. Furthermore, sub-groups with high expected health costs are more likely to value health insurance coverage, and therefore benefit from HIPAA's provisions. Comparing pre-and post-HIPAA changes in subpopulations with different insurance opportunities or with different expected health costs within states that lacked pre-HIPAA access reforms provides another test of the effects of HIPAA and provides a robustness check for the results.

States adopted different approaches to meeting the individual portability provisions of HIPAA, for example, high-risk pools, guaranteed issue, mandatory conversion. These different approaches may have different effects on insurance. We focus on two implementation strategies that were adopted by most states – high-risk pools and the federal fallback that requires all carriers to guarantee issue to HIPAA eligibles. For each implementation strategy, we distinguish states that had some regulations

providing for issue of individual health insurance from those that did not, since HIPAA effects may be greater in the latter states than in the former.¹⁴ We form four "experimental" state groups and one control state group (Exhibit 1), and compare insurance rates in each of the experimental groups with rates in the control group.

The dependent variable in the analysis of the effect of HIPAA on insurance indicates whether an individual has insurance or not. The model also includes a full set of state dummies and year dummies to control for time invariant state differences and for trends and time shocks to insurance. The model also includes a full set of demographic control variables including age dummies, sex, race, family composition, and health. Last job information is also included, if available.

RESULTS

Health Insurance Profile of New Retirees

In the wave prior to retirement, 90% of workers have employer provided health insurance (Exhibit 2). For 77% of workers, this coverage is through their own employer and for 13% coverage is through their spouse's employer. After retirement, own employer provided coverage drops to 58%, and spousal coverage rises to 18%, suggesting that new

retirees seek out spouse coverage in lieu of their own employer provided coverage. Public insurance and other private coverage also rise after retirement. However, despite the increase in non-employer sources of health insurance, the percent uninsured rises from 5% before retirement to 11% after retirement. Earlier research found similar trends in employer-provided health insurance using data from the mid-1980s; however, the earlier data found that uninsured rates only increased by 2 percentage points post-retirement (from 7 to 9%), and a higher proportion of retirees obtained privately purchased health insurance (13%).¹⁵

For individuals who had employer provided coverage before retirement, 71% continue to be covered by their employers after retirement either with continuation coverage policies or with retiree health insurance (Exhibit 3). However, 10% of those with employer coverage become uninsured. Almost three-quarters of individuals who were covered by spousal health insurance before retirement retain this insurance after retirement. Even after reporting retirement, a small fraction of individuals who did not have own employer coverage prior to retiring report having own employer coverage. These individuals gain

coverage by becoming reemployed in jobs that offer health insurance after reporting retirement.

The time path of health insurance coverage for retirees who had own employer health insurance shows a decline in own employer coverage between the first and the second waves after retirement, from 71% to 60%; however own employer coverage does not change much after the second wave (Exhibit 4). Individuals who purchase continuation coverage from their employer cannot keep it longer than 18 months, and therefore, this coverage is exhausted by the second wave after retirement. The percent uninsured and the percent covered by alternative private health insurance sources remains relatively stable over time; however, public insurance coverage rises over time, with more of the near elderly becoming eligible for Medicare through disability.

Factors that Affect Insurance after Retirement

Exhibit 5 shows that retirees' demographic characteristics are significantly associated with the propensity to retain insurance after retirement. Women are over 2 percentage points more likely to remain insured after retirement - this difference can be attributed to the fact that women are more likely to obtain coverage from

their husbands. Higher educated retirees are also more likely to retain insurance. Not surprisingly, retirees who are offered retiree employer coverage are 3 percentage points more likely to remain insured. Retirees in fair or poor health are more likely to lose insurance, possibly because they face higher premiums in the individual market. Family characteristics such as access to spousal insurance and high family income also increase the likelihood of maintaining health insurance after retirement.

Effect of HIPAA on Insurance

The results from the multivariate analysis of the effect of HIPAA on insurance rates show that HIPAA appears to have a positive, but statistically insignificant effect on insurance.¹⁶ Exhibit 6 reports that the effect of HIPAA on insurance, adjusted for comparisons to control states and time periods, is small -- between 0.04 and 0.2 percentage points. However, the confidence intervals around these estimates are wide enough that they cannot preclude that HIPAA had an effect on insurance.

Alternative estimation strategies that compared insurance rates for individuals with high demand for health insurance before and after HIPAA, and that compared insurance rates for individuals who had access to spouse

health insurance versus those who did not, before and after HIPAA, also yielded statistically insignificant estimates. These results are not reported in the tables.

DISCUSSION

Health insurance is an important benefit for the near elderly after retirement. Our analysis shows that only a small proportion of those who had own employer health insurance before retirement lose this coverage. However, retirees who lose coverage tend to be in poorer health, less educated, and with lower family income. These individuals are likely to be financially vulnerable in the face of high medical expenses. Furthermore, such retirees may be more likely to have lapses in their preventive care and to have problems maintaining their medical regimens and prescriptions, leading to higher health costs during their years of Medicare eligibility.

We find no evidence that insurance rates have increased for the near elderly as a result of the passage of HIPAA. Even though HIPAA guarantees the availability of individual health insurance, it is not accompanied by any restrictions on health insurance premiums. It is possible that individual health insurance premiums are too high for the lower income near elderly to find affordable. The average monthly single

premium in 2003 was \$210 and the average monthly family premium was \$322.¹⁷ For the near elderly, in states without premium regulation, HIPAA premiums can be much higher than these averages. For individuals with low family income who have lost wage income due to retirement, these premiums may be unaffordable. For individuals who can afford to purchase health insurance, COBRA coverage already provides some bridge insurance coverage, further minimizing the potential impact of HIPAA.

Recently, tax credits have been advocated as a method to help low-income individuals to purchase individual health insurance. The Bush Administration has proposed tax credits for low-income families who do not have access to employer-sponsored coverage.¹⁸ Most research has been quite pessimistic about the potential impact of tax credits, since health insurance take-up appears not to be very responsive to small reductions in the price.¹⁹ However, it is possible that the near elderly may value health insurance enough to purchase coverage if provided with sufficient assistance.

ACKNOWLEDGEMENTS

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NOTES

EXHIBIT 1: HIPAA ANALYTIC PLAN: STATE GROUPINGS

State Group			
Number	Pre-HIPAA State Regulations	Post-HIPAA state compliance method	Example
1	No pre-HIPAA state regulation	Guaranteed issue	AZ
2	Some pre-HIPAA state regulation	Guaranteed issue	CA
3	No pre-HIPAA state regulation	High risk pool	IL
4	Some pre-HIPAA state regulation	High risk pool	CT
5	State regulations met or exceeded HIPAA	N/A: state regulations met or exceeded HIPAA	NY

EXHIBIT 2: HEALTH INSURANCE PROFILE BEFORE AND AFTER RETIREMENT

Health Insurance Type	Pre-Retirement	Post-Retirement
Own Employer Health Insurance	77%	58%
Spouse Employer Health Insurance	13%	18%
Public Insurance	2%	5%
Other Private	3%	8%
Uninsured	5%	11%
	100%	100%

EXHIBIT 3: INSURANCE TRANSITIONS AFTER RETIREMENT

Primary Source of
Insurance Before
Retirement

Primary Source of Insurance After Retirement

	Own EPHI	Spouse EPHI	Public Insurance	Other Private	Uninsured	Total
Own EPHI	71.3%	10.2%	3.6%	4.7%	10.2%	100.0%
Spouse EPHI	16.5%	72.7%	1.9%	3.5%	5.5%	100.0%
Public Insurance	9.1%	3.0%	72.1%	0.0%	15.8%	100.0%
Other Private	4.5%	6.0%	9.5%	59.1%	20.9%	100.0%
Uninsured	6.5%	6.3%	16.7%	6.8%	63.7%	100.0%

EXHIBIT 4: TIME PATH OF HEALTH INSURANCE AFTER RETIREMENT

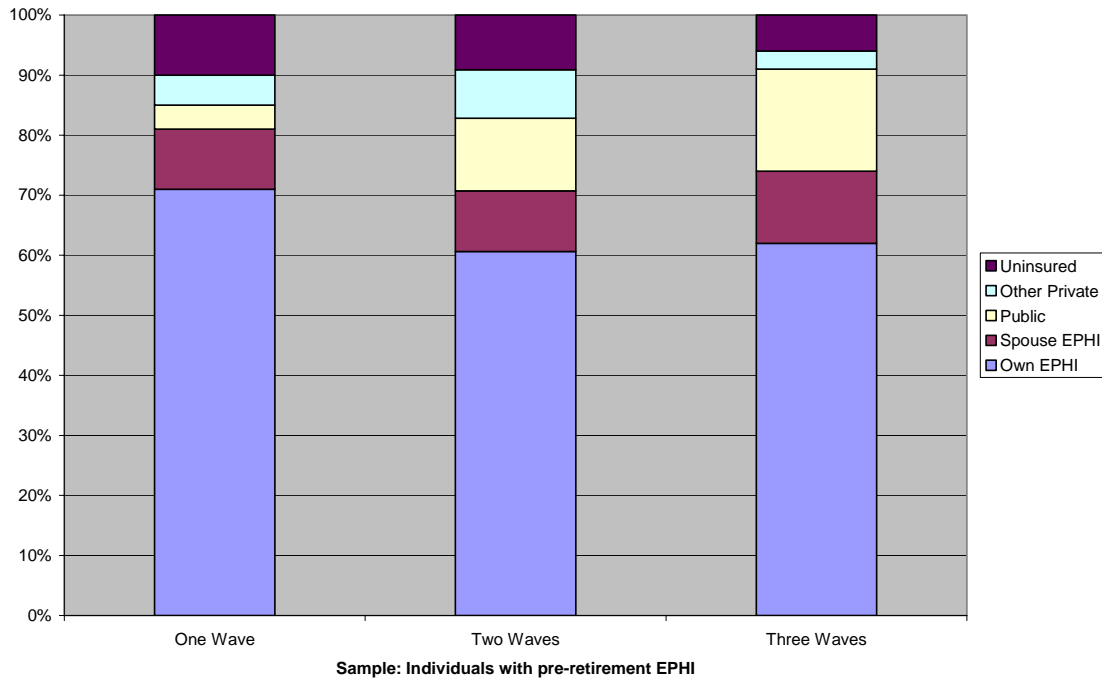


EXHIBIT 5: FACTORS THAT AFFECT INSURANCE AFTER RETIREMENT
(Fitted predictions from a logit model of health insurance coverage on retirees)

<i>Retiree Characteristics</i>	Percent Insured
Sex	
Male	92.2 **
Female	94.8
Education	
Less than High School	91 **
High School	93.4
College	97.3
Health	
Good	94.6 **
Fair/Poor	91.1
Employer Retiree Health Insurance	
Offered	95 *
Not Offered	91.6
<i>Family Characteristics</i>	
Spouse EPHI	
EPHI	96.1 *
No EPHI	92.9
Spouse Education	
Less than High School	92.5 **
High School	94.3
College	97.9
Family Income	
10th pctl	93 *
90th pctl	95
Number of Cases	1562

* denotes statistical significance at the 5 percent level

** denotes statistical significance at the 10 percent level

Note: The following variables were included in the model but are not reported in the table --
Age, spouse age, marital status, wage, spouse wage, tenure, spouse tenure, medical conditions
BMI, number of waves after retirement.

EXHIBIT 6: EFFECT OF HIPAA ON INSURANCE RATES
Results from several alternative multivariate models

State Group Comparison	State Group Numbers	Percentage Point Effect on Insurance
No pre-HIPAA vs. all pre-HIPAA, Guaranteed Issue	1 vs. 5	0.04
No pre-HIPAA vs. all pre-HIPAA, High Risk pool	3 vs. 5	0.04
No or some pre-HIPAA vs. all pre-HIPAA	(1,2,3,4) vs. 5	0.2

Note: None of the estimates are statistically significant

¹ Agency for Healthcare Research and Quality, 2000.
 Medical Expenditure Panel Survey - Table Compendium.
 August 2003, Rockville, MD.
http://www.meps.ahrq.gov/CompendiumTables/TC_TOC.HTM

² W.W. Yu and S. Machlin, "Examination of Skewed Health Expenditure Data from the Medical Expenditure Panel Survey (MEPS)." AHRQ Working Paper No. 04002. October 2004.

³ The uninsured and insured face similar absolute dollar wealth declines (about \$28,000) as a result of a health shock; however, there is no evidence that these estimates are statistically significant. See H. Levy, "The Economic Consequences of being Uninsured," ERIU Working Paper 12, October 2002.

⁴ Authors' calculations based on the HRS.

⁵ See, for example: J.Z. Ayanian, J.S. Weissmin, E.C. Schneider, et al. Unmet health needs of uninsured adults in the United States. *Journal of the American Medical Association* 2000; 284(16):2061-2069; D.W. Baker, M.F. Shapiro, C.L. Schur. Health insurance and access to care for symptomatic conditions. *Archives of Internal Medicine* 2000;160(9):1269-1274.

⁶ D.W. Baker, J.J. Sudano, J.M. Albert, et al. Lack of health insurance and decline in overall health in late middle age. *New England Journal of Medicine* 2001;345(15):1106-1112; P. Franks, C.M. Clancy, M.R. Gold. Health insurance and mortality: evidence from a national cohort. *Journal of the American Medical Association* 1993;270(6):737-741; and P.D. Sorlie, N.J. Johnson, E. Backlund, D.D. Bradham. Mortality in the uninsured compared with persons with public and private health insurance. *Archives of Internal Medicine* 1994;154(21):2409-2416.

⁷ The research on this issue has found mixed results. Being uninsured increases mortality, and therefore the effect on Medicare costs may ultimately be quite small. See J. Escarce and K. Kapur "The Health Care Costs of being Uninsured in Late Middle Age," Report to the Kellogg Foundation, 2004.

⁸ From the law that established the program, the Consolidated Omnibus Budget Reconciliation Act of 1985.

⁹ Estimates of the take-up rate among eligible workers are about 20 to 25%. See: P. Flynn, "COBRA Qualifying Events and Elections, 1987-1991," *Inquiry* (Summer 1994):

215-220; and M.C. Berger, D.A. Black, F.A. Scott, and A. Chandra, "Health Insurance Coverage of the Unemployed: COBRA and the Potential Effects of Kassebaum-Kennedy," *Journal of Policy Analysis and Management* 18, no. 3 (Summer 1999): 430-448.

¹⁰ G. Scandlen, *Helping Laid-Off Workers Keep Insurance*, Brief Analysis No. 373 (Washington: National Center for Policy Analysis, Oct 4, 2001).

¹¹ D. J. Chollet, K.I. Simon, and A. M. Kirk (2000), "What Impact HIPAA? State Regulation and Private Health Insurance Coverage Among Adults,"

<http://aspe.hhs.gov/health/reports/hippaimpact/index.html#toc>; and K. Pollitz, N. Tapay, E. Hadley, and J. Specht

(2000), "Early Experience With 'New Federalism' in Health Insurance Regulation." *Health Affairs*, July/August; and L.M. Nichols, and L. J. Blumberg (1998), "A Different Kind of 'New Federalism'? The Health Insurance Portability Act of 1996," *Health Affairs*, May/June.

¹² We count individuals who self report that they are retired and individuals who have a reported labor force status of full-time retired as "retired". In sensitivity analysis, we redefined the retirement variable to capture

part-time and full-time retirement and found similar results.

¹³ The analytic plan is derived from a feasibility study for the analysis of HIPAA. See S.H. Long and M. S. Marquis with E. R. Harrison, P. D. Jacobson, and Jennifer S. Sloan (1998), "Baseline Information for Evaluating the Implementation of the Health Insurance Portability and Accountability Act of 1996: Final Report," <http://aspe.hhs.gov/health/reports/hipabase/toc.htm>.

¹⁴ Most states that had some but not all of HIPAA's provisions as state regulation had pre-existing condition limitations, but lacked guaranteed issue clauses.

¹⁵ J. A. Rogowski and L. A. Karoly, "COBRA Continuation Coverage: Effect on the Health Insurance Status of Early Retirees," in *Health Benefits and the Workforce: A Research Compendium*, Volume 2, Department of Labor, 1997.

¹⁶ Since COBRA coverage should be used for the first 18 months after retirement, we reran the models excluding the first wave after retirement. We found similar estimates.

¹⁷ Survey conducted by the Kaiser Family Foundation and eHealthInsurance.

¹⁸ M.V. Pauly, Keeping Health Insurance Tax Credits on the Table, Journal of the American Medical Association, 291,18,2004, 2255-2256.

¹⁹ M.S. Marquis, M.B. Buntin, J.J. Escarce, K.Kapur, Subsidies and the Demand for Individual Health Insurance in California, Health Services Research, 39,5, October 2004, 1547-1570.